

Overview of the Curriculum

The science of genetics, launched with the rediscovery of Mendel's Laws in 1900, is very much in the news. Within the subject of Genetics there are more areas than can be covered in a semester. We've picked out many of the basic concepts that we think are important in a broad introductory survey course.

- 1) Transmission genetics in higher organisms, using classical analysis of crosses.
- 2) Molecular genetics in the DNA age, the molecular nature of the gene and gene expression. This includes the biochemical nature, function and organization of the genetic material using the approaches of molecular genetics.
- 3) Population genetics and the distribution of genes in real populations.

Interspersed will be topics from the modern era: Genetic engineering, forensic techniques, recombinant DNA technology and genomics.

Scheduling and Enrollment

BICD100 (B00) meets at 2:00 - 2:50 PM MWF as a Zoom meeting (See ZOOM LTI Pro for links to meetings). Associated 50 min. discussions sections are listed by section below. They will also meet via Zoom. It is very important that you attend the section for which you are registered. Discussion sections will commence on **in Week 1** for icebreakers.

Section	Time	IA	Meeting ID
B01	M 12pm	Raymond Zurich	e-mailed to you
B02	M 1pm	Chelsea Choi	683-946-520
B03	W 8am	Abigail Limary	814-216-671
B04	W 3pm	Chelsea Choi	346-147-331
B05	W 4pm	Ben Chan	113-026-753
B06	F 10am	Carli Underhill	187-688-943
B07	F 11am	Carli Underhill	898-405-055
B08	F 5pm	Amin Shayan	113-718-650
B09	F 6pm	Amin Shayan	670-246-576
B10	F 7pm	Jeffrey Keller	254-274-072
B11	M 10 am	Mona Roshan	516-069-780

Canvas Learning Management System

We will be using Canvas to deliver our course materials over the Internet. You will be able to use this course site to download copies of course materials and view your grades.

Staff Directory and Office Hours

Lecturer

Chris Day cdday@ucsd.edu

Office hours: **Wed 7pm** Meeting ID: 120-314-667

IAs

IA	e-mail	Office Hours	Meeting ID (confirm on Zoom LTI PRO calendar)
Chelsea Choi	hjc027@ucsd.edu	Mon 12 PM	437-339-805
Jeffrey Keller	jkeller@ucsd.edu		
Mona Roshan	mroshan@ucsd.edu	Tues 10 AM	463-892-059
Amin Shayan	aashayan@ucsd.edu		
Raymond Zurich	rzurich@ucsd.edu	Wed 3 PM	211-339-794
Carli Underhill	cunderhi@ucsd.edu		
Abigail Limary	alimary@ucsd.edu	Fri 4 PM	584-308-215
Ben Chan	bgchan@ucsd.edu		

Grade Scale:

We do not curve. Consequently, you are not in competition with anyone for a grade.

Grades will be based on your percentage in the course:

90% A (A-, A or A+)

78% B (B-, B or B+)

65% C (C-, C or C+)

55% D

Text and other materials for self-guided study

One textbook is recommended for the course:

Klug et al. Essentials of Genetics, but any general genetics text, even older editions, will be OK as no specific readings will be assigned. Further, online resources have been posted on Canvas. See Course Strategies for more information on how to make the most of the any text book, or online resources, that you have plan to use.

Practice Problems:

You will have access to old problem sets and exams that I have written in the past. These will be posted on the Canvas website. Answers will be posted a before each exam, BUT it is important that you attempt the questions before reviewing the answers. In addition, there are many good questions in text books that are helpful towards mastering our learning goals.

Online quizzes:

A total of three points are available for each multi-choice quiz. 1pt for completing the quiz and 2pt for getting above 75%. There will be eight quizzes.

The quizzes and practice problem sets are primarily for you to get practice with concepts as we progress through the learning objectives. For quiz questions that appear to be stumping the whole class I will review those concepts in class, or you can work on the material during discussion.

Grades: Exams, Assignments and Participation

Your grade for BICD100 will be based on your performance on assignments and three exams. The assignments will give you opportunities to work with the material and to practice the kinds of problem-solving skills you will need for the exams. Each of the exams will cover material from the lectures listed below.

Course Component	Date	Time	Description	Weight %
Mid-term	Mon May 4	2-3 pm	Material covered up to the exam	15
Final Exam	Fri Jun 12	3 pm - 6 pm	Comprehensive	30
Homework	Fri Apr17, Fri May 1, Fri May 15, Fri May 29	Take home	Lowest grade of the four can be dropped. 15 pt assigned to each problem set.	25
Online quizzes	Ad Hoc, after each unit.	Canvas Quizzes	8 online quizzes	10
Genetics in the News	Fri Apr 10, Fri May 10	Take home	Online assignment and Discussion	15
Seminar	By 10th week	Take home	Attend online Seminar on a genetics related topic	5
			Total	100

Exam format:

Each exam will have both multi-choice questions and short answer questions. Exams will be open book.

Homework Problems:

The four take-home problem sets count for about 25% of your course grade. Note that the lowest score will be dropped.

All late problem sets will be assigned a zero grade.

We encourage you to work together in study groups to discuss the questions, this could help you better understand the material.

If you do choose to work in groups, try not to make the mistake of simply accepting another student's answer and thinking you understand it. You need to attempt the problem set prior to meeting. You will always have a better understanding if you have gone through the problem-solving process.

Please list the names of your collaborators on your assignment. Each student must write her/his own answers, in his/her own words, after working with the group.

Discussion:

Discussion activities will complement the lecture material as well as allowing you to review the more challenging material. You must attend the discussion section that you signed up for when selecting the class.

Zoom-cast

Zoom lectures will be recorded and available in the Media Gallery tab in canvas.

Course Administration

Dr. Day is the first person to contact for all questions of course enrollment, section changes, grade records, signing up for early make-up exams (allowed only exceptional reasons), and any special needs.

Discussion Board

A live discussion boards will be available during the exam for clarification questions.

Outside of the exam it can be used to ask questions relating to the genetic material we cover, or general questions. Dr Day and the IA's will try and review the new questions at least once a day.

Do feel free to answer questions too. Answering each others questions is a really good way to solidify your knowledge.

Special Needs and Religious Holidays:

Please let Dr. Day know as soon as possible if you have any special needs that we should accommodate or a religious holiday that will conflict with a course activity.

Students' Questions and Feedback:

The staff of this course, lecturer and IAs alike, welcome your questions, suggestions, and comments. We want to get to know you, and we appreciate your feedback.

Board of Directors:

In addition, we would like to have volunteers from the class to serve as class representatives and meet once a week with Dr Day. This is valuable for us since it allows you, the students, to make constructive suggestions, especially if there are logistical problems or other concerns. Given the online nature of this course, we imagine that a lot of problems will arise. In short, student concerns can be aired in a way such that real changes can be made. In our experience this open communication helps teaching staff and students alike.

Academic integrity (<https://students.ucsd.edu/academics/academic-integrity/index.html>)

Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual(s) to whom it is assigned, without unauthorized aid of any kind. Anyone caught cheating (includes plagiarizing lab reports, cheating on a test, or changing an answer for a re-grade) will be reported to the Academic Integrity Office.

Inclusion and accessibility (<http://disabilities.ucsd.edu>)

Any student with a disability is welcome to contact us early in the quarter to work out reasonable accommodations to support your success in this course. Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD), which is located in University Center 202 behind Center Hall. Students are required to present their AFA letters to faculty and to the OSD Liaison in the Division of Biological Sciences in advance so that accommodations may be arranged. For further information, contact the OSD at 858-534-4382 or osd@ucsd.edu